Just In Time Quick Check

Standard of Learning (SOL) 1.4b

Strand: Number and Number Sense

Standard of Learning (SOL) 1.4b

The student will represent and name fractions for halves and fourths, using models.

Grade Level Skills:

- Represent halves and fourths of a whole, using a region/area model (e.g., pie pieces, pattern blocks, paper folding, and drawings).
- Name fractions represented by drawings or concrete materials for halves and fourths.

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting Resources:

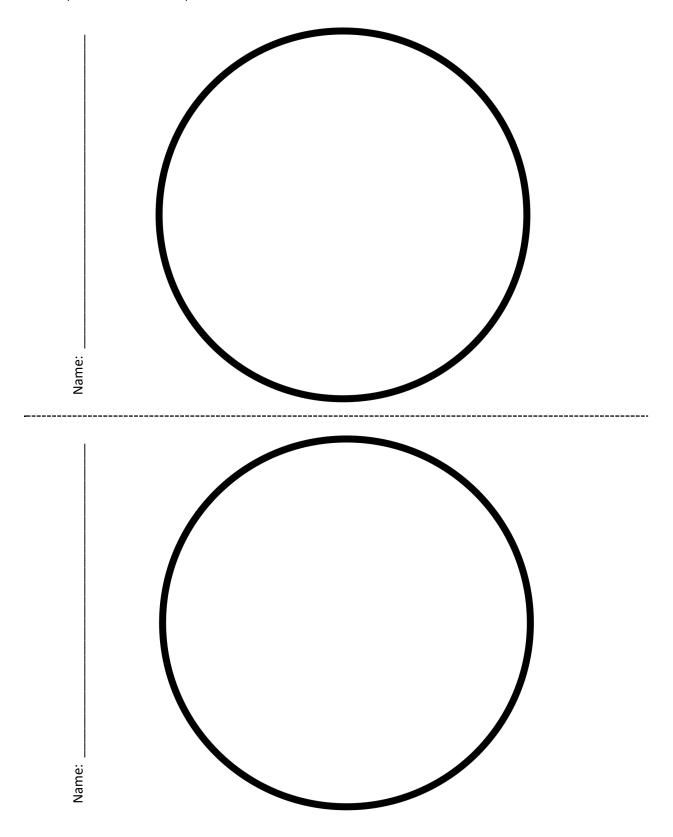
- VDOE Mathematics Instructional Plans (MIPS)
 - o <u>1.4ab Sharing Brownies</u> (Word) / <u>PDF Version</u>
- VDOE Word Wall Cards: Grade 1 (Word) | (PDF)
 - Fair Share
 - o Fraction: Half and Fourth

Supporting and Prerequisite SOL: 1.4a, K.5

SOL 1.4b - Just in Time Quick Check: Student Interview

- 1) Hand student a paper square and say: This represents a brownie.
 - a) Can you fold it to show me how two friends can share it fairly?
 - b) How do you know it is shared fairly?
 - c) Can you name the pieces for me? (half; halves; one half, two halves)
- 2) Hand the student a paper pie and say: This represents a pie.
 - a) Can you draw on it to show me how four friends could share it fairly?
 - b) How do you know it is shared fairly?
 - c) Can you name each piece for me? (fourths; one fourth, two fourths, three fourths, four fourths)

Brownies – one per student		



SOL 1.4b - Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

- 1) Hand student a paper square and say: This represents a brownie.
 - a) Can you fold it to show me how two friends can share it fairly?
 - b) How do you know it is shared fairly?
 - c) Can you name the pieces for me? (half; halves; one half, two halves)

Most children are quite intuitive about sharing something equally between two people. However, there are some who may not be able to show and/or describe that the parts are equal or the same amount. These students will benefit from fraction problems presented in context (word problems) and using concrete representations to strengthen their fractional understanding. Students are intuitive about fair shares but may have difficulty articulating that idea and will benefit from an emphasis on mathematical vocabulary used to describe the pieces (half, halves, equal, the same).

- 2) Hand the student a paper pie and say: This represents a pie.
 - a) Can you draw on it to show me how four friends could share it fairly?
 - b) How do you know it is shared fairly?
 - c) Can you name each piece for me? (fourths; one fourth, two fourths, three fourths, four fourths)

Students may have a difficult time showing 4 equal parts. They may simply divide into 4 parts of varying sizes, or may draw 4 lines that do not create equal parts. Students will benefit from fraction problems presented in the form of real life situations and using concrete representations (rather than pictures and drawings) to strengthen their fractional understanding of equal parts. Some students may have difficulty articulating the idea of fair shares and will benefit from an emphasis on using the mathematical vocabulary fourth, equal, the same to describe parts when comparing.

For these tasks, it is common for younger students to consider their food preferences when splitting the brownie and pie, thus resulting in an incorrect answer (they love or hate brownies, and make two uneven pieces). If this occurs, choose a different food, ask the student to choose a different food, or simply remind the student that the drawings only represent a brownie or a pie. If the student is still stuck on the food, present the task as cutting the paper into equal pieces.

Young students need many informal opportunities to divide up a variety of objects into equal parts, to compare those parts, and describe the resulting pieces using the terms half, halves, fourths, etc.